NC/QC/W-13/2018-19/UW-C1 Date: 26-02-2019

1. TEST REPORT ON CEMENT:

Sub: Testing of 53 Grade Cement Sample (IS 12269-1987).
{Project*: Developments UGD Works in Mallasandra Ward No 13 In Shettyhalli Sub Division.}
Ref.: Material testing/W-13/QC/18-19,
Report Required for: Assistant Executive Engineer,
Shettyhalli Sub division,
BBMP, Bangalore.
Name of the Agency/Contractor*: The Technical Manager (West), KRIDL, Bangalore.

PHYSICAL TESTS ON CEMENT

Brand : RAMCO
Grade * : 53,
Type * : O.P.C

TABLE 1.1:

SL No	Name of Test	Test Results	Requirements as per IS 8112-1989
1	Initial setting time	**164 min**	Shall not be less than 30 min
2	Final setting time	**271 min**	Shall not be more than 600 min
3	Fineness (by dry sieving on IS 90 micron sieve)	**1.96 %**	Not to exceed 10.0%
4	Soundness test(by Le-Chatelier's method)	**1.82 mm**	Shall not be more than 10 mm
5	Compressive strength a) 3 days (average of three results)	**28.77 N/ Sq mm**	Shall not be less than 27 N/Sqmm

K. R
KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore

Proprietor

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA,
JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

Scanned by CamScanner

NC/QC/W-13/2018-19/UW-FA1

Date: 26-02-2019

1. TESTING OF FINE AGGREGATES :

Sub: Testing of Fine Aggregates.
{Project*: Developments UGD Works in Mallasandra Ward No 13 In Shettyhalli Sub Division.}
Ref.: Material testing/W-13/QC/18-19,
Report Required for: Assistant Executive Engineer,
Shettyhalli Sub division,
BBMP, Bangalore.
Name of the Agency/Contractor*: The Technical Manager (West), KRIDL, Bangalore

TABLE - 1.1 : SIEVE ANALYSIS :

IS Sieve Size,mm	Percentage Passing	Specification as Per IS: 383-1970(Reaffirmed 2002) Percentage Passing			Remarks
		Zone-I	Zone-II	Zone -II	
04.75	**97.15**	90-100	90-100	90-100	The Sample Conforms to Grading **Zone-II**
02.36	**81.95**	60-95	75-100	85-100	
01.18	**63.75**	30-70	55-90	75-100	
600. mic	**49.40**	15.34	35-59	60-79	
300.mic	**16.10**	5-20	8-30	12-40	
150.mic	**7.55**	0-10	0-10	0-10	

TABLE 1.2 ;

Sl No	Test Conducted	Sample	Results	**Requirements** as Per IS. Specification IS :383-1970 (Reaffirmed 2002)
1	Bulking of Sand	001	**16.96 %**	-----
2	Silt Content	----	**0.60 %**	Not more than 8%
3	Specific Gravity	----	**2.61**	-------

ವಾಯುಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಶೆಟ್ಟಿಹಳ್ಳಿ ಉಪವಿಭಾಗ, ರಾಜರಾಜೇಶ್ವರಿ ನಗರ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಎಸ್.ಎಂ. ರಸ್ತೆ, ರವೀಂದ್ರನಗರ, ಬೆಂಗಳೂರು

KIRAN. R
M.E, (Civil-Engg)
For Newzen Consultants Bangalore
Proprietor

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA,
JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

Scanned by CamScanner

NC/QC/W-13/2018-19/UW-CA1

Date: 26-02-2019

1. TESTING OF COARSE AGGREGATES (20 mm):

Sub: Testing of Construction Materials.

{Project*: Developments UGD Works in Mallasandra Ward No 13 In Shettyhalli Sub Division.}

Ref.: Material testing/W-13/QC/18-19,

Report Required for: Assistant Executive Engineer,
Shettyhalli Sub division,
BBMP, Bangalore.

Name of the Agency/Contractor*: The Technical Manager (West), KRIDL, Bangalore

Table - 1.1 : SIEVE ANALYSIS :

IS Sieve Size, mm	Percentage passing	Requirements as per IS 383-1970 (Reaffirmed on 2002) % Passing	
	20 mm Sample	Single size	Graded
40 mm	100.00	100.00	100.00
20 mm	95.10	85-100	90 - 100
10 mm	48.35	0 - 20	25 - 55
4.75 mm	3.70	0 - 5	0 - 10

TABLE 1.2 :

SL No	Test conducted	Results	Requirements as per IS:383-1970 & Tests Conforms to IS 2386(Part I to IV) – 1963 (Reaffirmed on 2002)
1.	Flakiness Index	22.40 %	Not to exceed 25 %
2.	Crushing value	27.85 %	Not to exceed 45 % for concrete other than for wearing surfaces and 30% for concrete for wearing surfaces

ಹಿರಿಯ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಕ್ಷೇ ...ಪವಿಭಾಗ, ದಾಸರಹಳ್ಳಿ ವಲಯ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಎಸ್.ಎಂ. ರಸ್ತೆ, ರವೀಂದ್ರನಗರ, ಬೆಂಗಳೂರು

KIRAN. R
M.E, (Civil-Engg)
For Newzen Consultants Bangalore
Proprietor

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA,
JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

Scanned by CamScanner

Newzen Consultants Bangalore

NC/QC/W-13/2018-19/UW-B1 **Date: 26-02-2019**

1. TEST REPORT ON BRICKS:

Sub: Testing of Bricks.

{Project*: Developments UGD Works in Mallasandra Ward No 13 In Shettyhalli Sub Division.}

Ref.: Material testing/W-13/QC/18-19,

Report Required for: Assistant Executive Engineer,
Shettyhalli Sub division,
BBMP, Bangalore.

Name of the Agency/Contractor*: The Technical Manager (West), KRIDL, Bangalore

I.WATER ABSORPTION TEST:

Sl No	Brand Name	Water absorption %	Average value %	Normal Values
1	Sample-I	9.84	**9.54 %**	As per IS:1077-1992 water absorption shall not be more than 20.00%
2	Sample-II	9.56		
3	Sample-III	9.31		
4	Sample-IV	9.24		
5	Sample-V	9.75		

II. COMPRESSIVE STRENGTH :

Sl No	Brand Name	Compressive Strength N/Sq.mm	Average value N/Sq.mm	Normal Values
1	Sample-I	5.90	**5.96**	---------
2	Sample-II	5.97		
3	Sample-III	6.03		
4	Sample-IV	5.88		
5	Sample-V	6.06		

III. EFFLORSCENCE:

Sl No	Brand	Efflorescence	Explanation as per IS: 3495:1992(Part-II)
1	Sample-I	Nil	Not more than 10 % of the exposed area of the brick is covered with a thin deposit of salts.
2	Sample-II	Nil	
3	Sample-III	Nil	
4	Sample-IV	Nil	
5	Sample-V	Nil	

KIRAN. R
M.E, (Civil-Engg)

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA,
JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

Scanned by CamScanner

NC/QC/W-13/2018-19/UW-W1 **Date: 05-03-2019**

TEST REPORT ON WET MIX MACADAM MIX

(GRADATION TEST)

Sub: To conduct Gradation test on Wet Mix Macadam (WMM) Mix.
{Project*: Developments UGD Works in Mallasandra Ward No 13 In Shettyhalli Sub Division.}

Ref.: Material testing/W-13/QC/18-19,

Report Required for: Assistant Executive Engineer,
Shettyhalli Sub division,
BBMP, Bangalore.

Name of the Agency/Contractor*: The Technical Manager (West), KRIDL, Bangalore

TEST RESULTS

1. Gradation Test:

TABLE 1.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
53.00	**100.00**	100
45.00	**97.35**	95-100
26.50	**---**	-
22.40	**61.90**	60-80
11.20	**44.55**	40-60
4.75	**29.80**	25-40
2.36	**16.15**	15-30
0.600	**12.40**	8-22
0.075	**3.75**	0-5

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಶೆಟ್ಟಿಹಳ್ಳಿ ಉಪವಿಭಾಗ, ದಾಸರಹಳ್ಳಿ ವಲಯ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಎಸ್.ಎಂ. ರಸ್ತೆ, ರವೀಂದ್ರನಗರ, ಬೆಂಗಳೂರು

KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore

Proprietor

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA,
JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

Scanned by CamScanner

Date: 05-03-2019

TABLE 1.2

SL No	Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)– 1963 (Reaffirmed on 2002) & Requirements as per IS:383-1970 & M.o.R.T.H Specification, V Revision -2013.
1.	Aggregate Impact Value	27.91 %	Not more than 30.00 %
2.	Combined Flakiness and Elongation index, %	23.46 %	Not more than 35.0 %
3.	Water absorption, %	0.40 %	Not more than 2.0 %
4.	Plasticity Index, %	NP	Not more than 6.0 %

AE

ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಲೋಕೋಪಯೋಗಿ ಉಪವಿಭಾಗ. ದಾಸರಹಳ್ಳಿ ವಲಯ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬಿಸ್.ಎಂ. ರಸ್ತೆ. ರವೀಂದ್ರನಗರ. ಬೆಂಗಳೂರು

KIRAN. R
M.E, (Civil-Engg)
For Newzen Consultants Bangalore

Proprietor

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA,
JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

Scanned by CamScanner